



THE NEW QUALITATIVE EVALUATION CRITERIA

SuHAMK CoARAb Project:
Strengthening the Qualitative Criteria
for the Researcher Assessment at
Häme University of Applied Sciences

Abstract

This document contains the new qualitative evaluation criteria which have been developed as part of the SuHAMK CoARAb project. These new qualitative evaluation criteria have been designed for the evaluation of Principal Research Scientists at Häme University of Applied Sciences

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SuHAMK CoARAb Project

This document has been created as part of the SuHAMK CoARAb project at Häme University of Applied Sciences. The SuHAMK CoARAb project is part of the CoARA Cascade Boost Funding and funded by the European Union.

This 1-year EU funded project aims to develop new effective qualitative researcher evaluation criteria which will be mapped into HAMK's existing principal research scientist evaluation processes. The new qualitative researcher evaluation criteria support the recognition of diverse researcher skills and different researcher career paths, enhances HAMK's research quality and promotes transparency and accountability in the researcher evaluation processes. Strong collaboration with HAMK's principal research scientists, principal research scientist supervisors, the researcher evaluation team and other relevant HAMK personnel have helped identify the new qualitative evaluation criteria in this document. A new sustainable evaluation framework will be developed around these new criteria and comprehensive training on their active utilization will be provided to relevant HAMK personnel.

The New Qualitative Evaluation Criteria

Over 80% of relevant HAMK personnel have participated in a range of fieldwork, including surveys, semi-structured interviews and workshops to help identify and develop the new qualitative evaluation criteria for principal research scientists. The new criteria have been divided into different themes, to help with coherency. However, some of the criteria can be captured through multiple tools and can be used to highlight different researcher skills and experience. Whilst researcher evaluation criteria have been focused upon, qualitative evaluation criteria for research have also been considered.

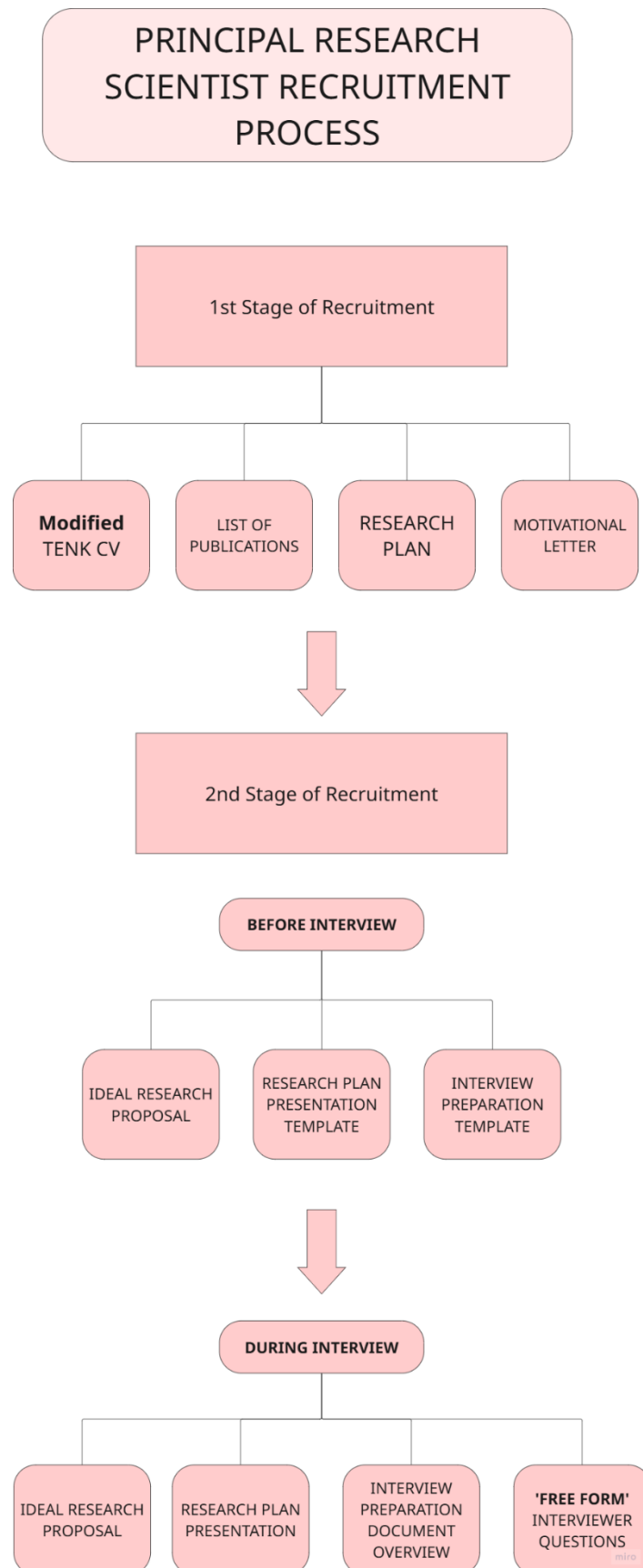
New Tools and Processes

New tools for both processes have also been developed to help the evaluators effectively identify and use the new evaluation criteria during the evaluation. The new criteria will be first integrated into HAMK principal research scientist recruitment process and tenure track evaluation process. Both processes have been modified, and new tools have been developed to enable the effective use of the new qualitative evaluation criteria. These new tools alongside the newly developed recruitment and tenure track evaluation processes will be published later. An overview of the tools is, however, provided below.

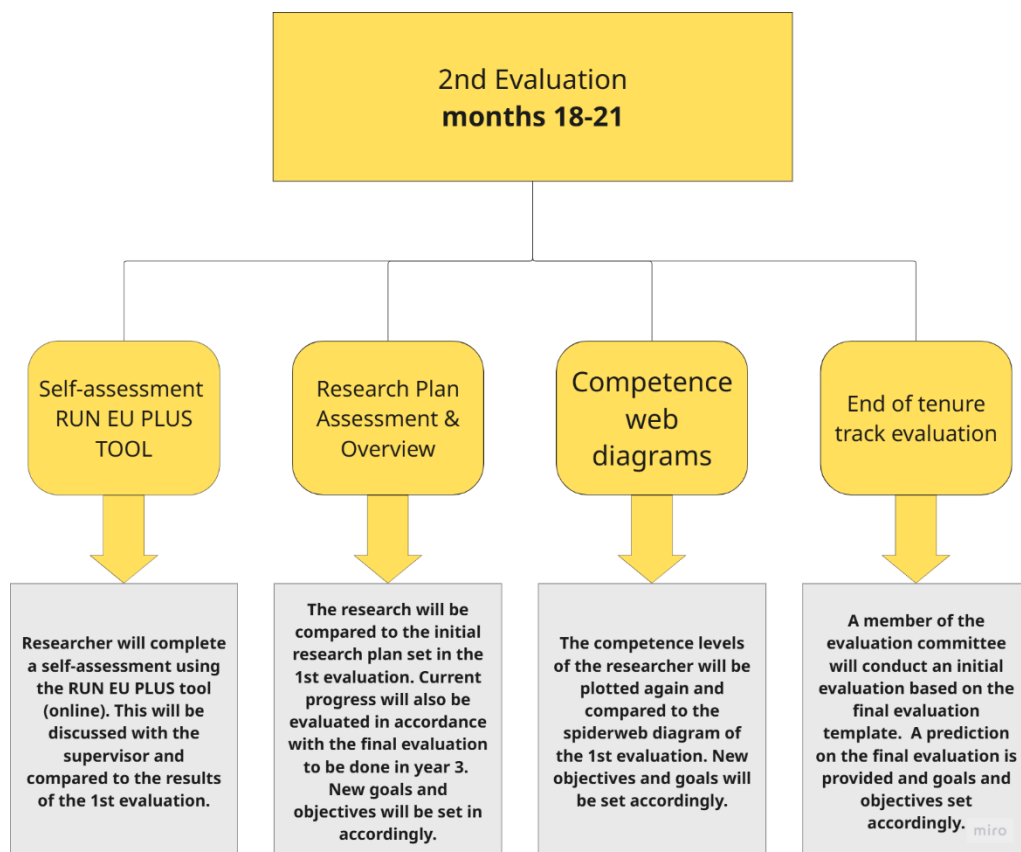
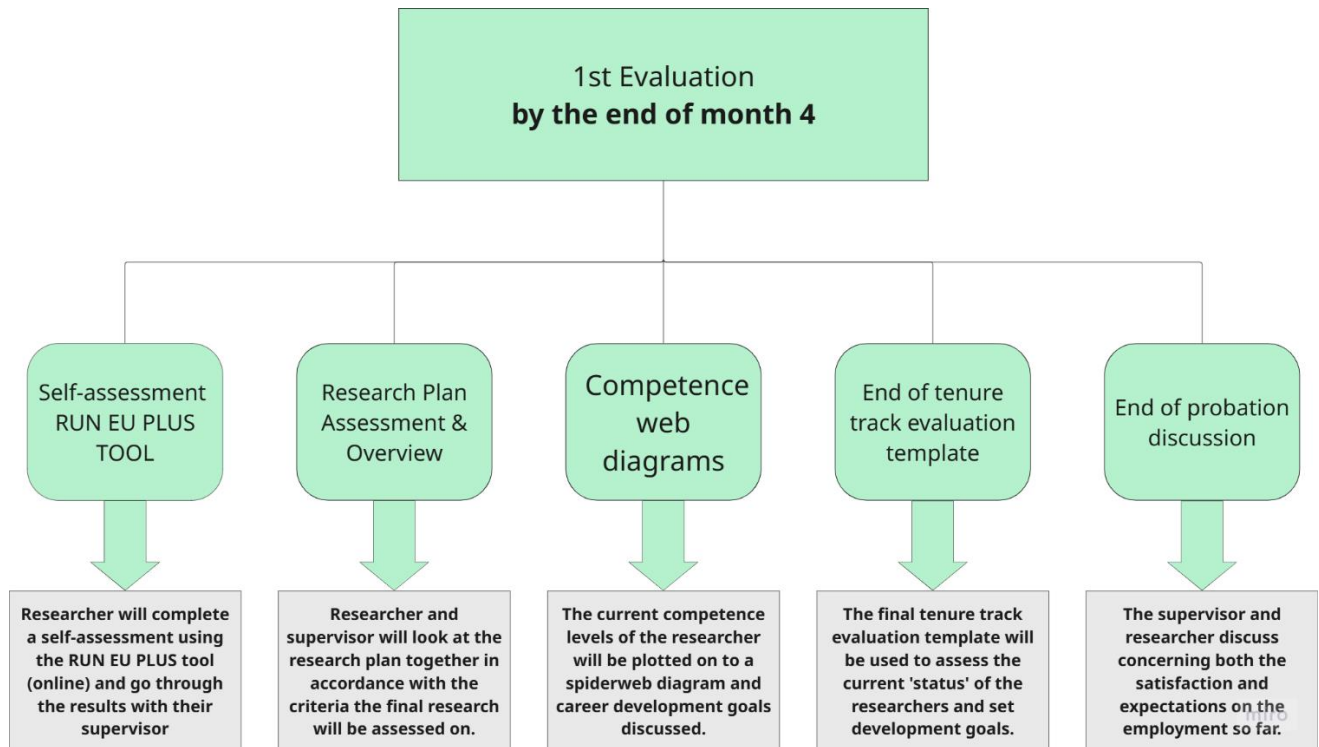
Recruitment Process	Tenure Track Process
Stage 1 of Recruitment TENK CV- HAMK modified template ➤ Applicants will provide a TENK CV with extra information needing to be added to some sections. Instructions and the modified template are provided.	RUN EU PLUS SELF-ASSESSMENT TOOL ➤ Researchers will need to conduct a self-assessment using the online tool mentioned above. This will be conducted during the 1st, 2nd and 3rd evaluation stages. The self-assessment will be discussed with the supervisor.
LIST OF PUBLICATIONS ➤ Applicants will provide an up-to-date list of publications.	RESEARCH PLAN ➤ The researchers will conduct a clear research plan with their respective

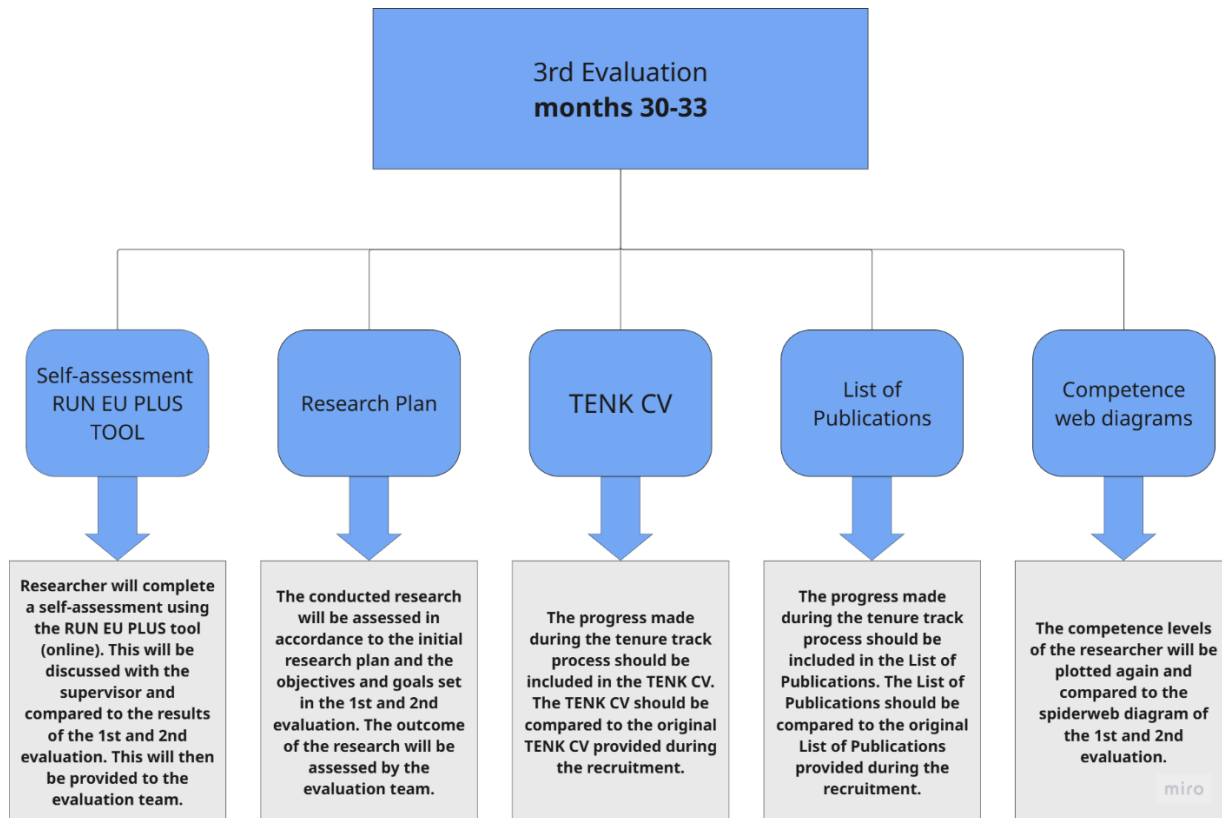
	supervisors at the 1 st evaluation stage. A progress overview will be conducted at the 2 nd evaluation stage and new objectives outlined. A final overview of the research plan and its successful implementation will be conducted at the 3 rd stage evaluation.
HAMK RESEARCH PLAN TEMPLATE ➤ Applicants will provide a HAMK appropriate research plan. A template of the research plan will be provided	HAMKHÄKKI COMPETENCE WEBS ➤ A spiderweb diagram will be created for each researcher plotting their current competence levels at the 1st evaluation stage. Needed career development support will be arranged accordingly. This will continue to be adjusted at the 2nd evaluation stage and a final overview of progress will be conducted at the 3rd evaluation stage.
Stage 2 of Recruitment INTERVIEW PREPARATION TEMPLATE ➤ Applicants will fill in an interview preparation template which contains certain interview questions. This will be sent to the recruiters and/or evaluators prior to the interview. Instructions and the template will be provided.	TENK CV ➤ Amendments to the TENK CV need to be made during the tenure track process. The progress made to the TENK CV will then be evaluated at the 3rd evaluation stage.
RESEARCH PLAN PRESENTATION ➤ Applicants will be asked to conduct a 10-minute research plan presentation at the interview. Instructions for the presentations, including important focus points, will be provided to the applicants.	LIST OF PUBLICATIONS ➤ Amendments to the list of publications need to be made during the tenure track process. The progress made to the list of publications will then be evaluated at the 3rd evaluation stage.
IDEAL RESEARCH TEMPLATE ➤ Applicants will be asked to describe and explain their ideal research proposal. This exercise is purely imaginary but helps to highlight applicants' innovative motivations and skills.	

New Recruitment Process



New Tenure Track Evaluation Process





Research, Development, Innovation, Pedagogical & Other Competencies (RDIP&C)

The tables below contain the qualitative evaluation criteria which will be used to evaluate Principal Research Scientists at HAMK. These criteria will be used to identify experience and skills in five different areas, **research, development, innovation, pedagogy** and **other competencies**. However, some of the criteria can be used to highlight skills and/or experience in more than one of the areas and may thus appear more than once.

Whilst quantitative criteria will still be used in order to capture the extent of the skills and experience the researcher possesses (e.g. how many awards, patents, publications, development projects have the researcher accomplished), it will be the qualitative criteria which will be used to identify the quality of these skills and experiences and also highlight the researchers future potential.

Whilst all five areas are important, during the **recruitment process** Principal Research Scientists will be **primarily evaluated** upon their skills, experience and potential in the area of **development** and are required to have **experience working with the business industry**.

During the **tenure track** evaluation process, the Principal Research Scientist will be **supported** in developing the necessary **skills and experience** needed in

- **RESEARCH,**
- **DEVELOPMENT,**
- **INNOVATION,**
- **PEDAGOGY**
- **and OTHER COMPETENCIES.**

Below the new qualitative evaluation **criteria** are listed, alongside a **description** of how the criteria should be used in the evaluation, and in which evaluation **process**, and through which **tools**, the criteria need to be identified.

Research Criteria

The criteria below will be used to capture the skills, experiences and competencies of researchers in research itself. Whilst quantitative data will be used to highlight the extent of experience the researcher has in the research field, the qualitative criteria below will showcase the range and quality of that experience and/or skills and help highlight the researcher's future potential.

Peer-Reviewed Publications	
Criteria	Description
Variation of role in authorship (1st author, 2nd author, etc.)	➤ Desirable to see varying roles in authorship. ➤ For early career researchers it is understandable to see more 1st author roles. ➤ For more senior career researchers it is important to see more 2nd, 3rd etc. author roles. ➤ Variation of authorship roles suggests flexibility in ideas, and teamwork and collaboration skills.
Open access publishing	➤ Desirable to see peer-reviewed articles being published in open access journals. ➤ Open access is promoted but understanding and caution for limitations in being able to publish in open access journals and the relatively 'recent' promotion of open access needs to be considered. ➤ Open access publishing reflects better 'research impact' and research dissemination, and similar 'open access' values.
Variation in transdisciplinary, interdisciplinary, multidisciplinary and specialization of published research	➤ Desirable to see a variation in both specialization and transdisciplinary, interdisciplinary, multidisciplinary publishing. ➤ The ability to publish with both field specialization and trans-, inter-, multidisciplinary approaches suggests innovative flexibility and reflects the values and research strategy of HAMK.
Variation of publication collaborations	➤ Desirable to see a variation in authorship collaborations. ➤ The ability to publish with a variety of different authors and researchers reflects collaboration and teamwork skills, innovative flexibility.
Variation of both sole authorship and multiple authorship publications	➤ Desirable to see that researchers are capable of publishing both sole and multiple author articles. ➤ For early career researchers it is understandable to see more sole authored articles. ➤ For more senior career researchers it is important to see collaboration with other authors. ➤ The ability to publish as a single author and as part of group of authors, reflects collaboration and teamwork skills, communication skills and innovative flexibility.

Collaboration within international authorship groups	➤ Desirable to see that researchers are capable of publishing both sole and multiple author articles. ➤ For early career researchers it is understandable to see more sole authored articles. ➤ For more senior career researchers it is important to see collaboration with other authors. ➤ The ability to publish within international authorship groups, reflects collaboration and teamwork skills, communication skills, innovative flexibility and expands potential research impact.
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Relevant Research Experience	
Criteria	Description
Practical experience in research field	➤ Important to recognise other relevant research related employment, roles or duties. ➤ Other relevant work experience where research has been conducted needs to be considered.
Ability to recognize appropriate tools, theoretical frameworks, analysis methods etc.	➤ Desirable to see that applicant can recognise and justify the use of appropriate tools, theoretical frameworks, analysis methods etc. when conducting research. ➤ This can be examined in the research proposal or ask the researcher to explain their use of the above mentioned in their previous research. ➤ Here it is also important to consider lessons learnt. If tools, theoretical frameworks, analysis methods have not been effectively or successfully incorporated into previous research, the researcher's acknowledgement of this also positively supports this criterion. ➤ Also good to ask and/or discuss negative or unsuccessful experiences.
Consideration and recognition for research ethics	➤ Desirable to see acknowledgement of research ethics in current research proposal and in previous research. ➤ This can be examined in the research proposal or ask the researcher to explain their use of ethics in their previous research. ➤ Here it is also important to consider lessons learnt. If ethics have not been effectively or successfully incorporated into previous research, the researcher's acknowledgement of this also positively supports this criterion. ➤ Also good to ask and/or discuss negative or unsuccessful experiences.
Consideration of regional, national, and/or international strategies	➤ Desirable for researchers to be able to connect and apply their research to regional, national and/or international strategies and issues.

	➤ This can be examined in the research proposal or ask the researcher to explain their use of regional, national, and/or international strategies in their previous research.
Suitability with HAMK strategy and/or education units	➤ Desirable for researchers to be able to consider the integration of their current research or previously conducted research with HAMK's research strategy and/or study units. ➤ This can be examined in the research proposal or ask the researcher to explain their consideration of research and education integration in their previous research.
Competence in funding applications, planning and strategy	➤ Desirable for researchers to be able to recognise their role in needing to secure funding and be able to recognise appropriate funding sources. ➤ This can be examined in the research proposal or ask the researcher to explain their strategy for securing funding in their research proposal or discuss previous funding application experiences. ➤ Here it is also important to consider lessons learnt. If funding source recognition and/or application has not been successful in current or previous research, the researcher's acknowledgement of this also positively supports this criterion.

Understanding of Research Impact

Criteria	Description
Ability to recognize appropriate tools, theoretical frameworks, analysis methods etc.	➤ Desirable to see that applicant can recognise and justify the use of appropriate tools, theoretical frameworks, analysis methods etc. when conducting research. ➤ This can be examined in the research proposal or ask the researcher to explain their use of the above mentioned in their previous research. ➤ Here it is also important to consider lessons learnt. If tools, theoretical frameworks, analysis methods have not been effectively or successfully incorporated into previous research, the researcher's acknowledgement of this also positively supports this criterion. ➤ Also good to ask and/or discuss negative or unsuccessful experiences.
Extent of research dissemination in research related and/or academic circles	➤ Desirable for researchers to have experience in sharing research results in relevant academic circles and networks. ➤ This includes research being shared in events, conferences, webinars, blogs etc. ➤ Important for researchers to be aware of appropriate platforms where research can be disseminated. ➤ This can be examined in the research proposal or ask the researcher to explain their research dissemination choices and experience in previous research. ➤ This criterion reflects wider dissemination skills, academic communication skills, and networking skills.

Use of transdisciplinary, interdisciplinary, multidisciplinary approaches	➤ Desirable to see transdisciplinary, interdisciplinary, multidisciplinary research experience. ➤ This can be examined in the research proposal or ask the researcher to explain their use of research transdisciplinary, interdisciplinary, multidisciplinary approaches and experience in previous research. ➤ Here it is also important to consider lessons learnt. If transdisciplinary, interdisciplinary, multidisciplinary approaches have not been used or incorporated effectively into previous research, the researcher's acknowledgement of this is also valuable.
Application of research findings e.g. policy proposals, legislation, corporate procedures etc.	➤ Desirable for research to have been actively incorporated or having influenced real processes. ➤ Here it is important to consider the research field itself and how plausible this is given the different circumstances and context of different research fields.

Effective Completion of Research

At HAMK the utilisation of the criteria below, will most likely occur during the tenure track evaluation process. However, the below mentioned criteria can also be applied and identified when examining previous or proposed research.

Criteria	Description
Objectives and aims achieved or shortcoming acknowledged	➤ The objectives and aims should be clearly defined and the manner in which they will be achieved and measured. ➤ The successful completion of these aims and objectives can be assessed. ➤ Important to also consider the 'failure' to achieve the initial outlined aims and objectives, when the researcher can identify the challenges, issues and lessons learnt. ➤ The ability of the researcher to acknowledge short coming and plan for their avoidance in the future is also a vital skill.
Time management	➤ An initial timeline should be outlined in the research proposal and further discussed during the tenure track. ➤ The ability of the research to adhere to the timeline or be able to justify or acknowledge changes to the timeline should be assessed. ➤ Justified amendments to the timeline in reaction to changes or unforeseen circumstances reflects problem-solving skills and should be acknowledged in the assessment.
Ability to recognize appropriate tools, theoretical frameworks, analysis methods etc.	➤ Desirable to see that applicant can recognise and justify the use of appropriate tools, theoretical frameworks, analysis methods etc. when conducting research. ➤ Here it is also important to consider lessons learnt. If tools, theoretical frameworks, analysis methods have not been effectively or successfully incorporated into previous research, the researcher's acknowledgement of this also positively supports this criterion.

	➤ Also good to ask and/or discuss negative or unsuccessful experiences.
Consideration and recognition for research ethics	➤ Examine the current completed research or the previously completed research. ➤ The application or consideration for ethics in the research where choices are justified, shortcomings acknowledged, lessons learnt indicates competence in completing quality research.
Consideration of regional, national, and/or international strategies	➤ Examine the current completed research or the previously completed research. ➤ The application or consideration for regional, national and/international strategies and/or objectives reflects that the research has been completed with wider impact in mind.
Consideration of integration with education	➤ Examine the current completed research or the previously completed research. ➤ The application or consideration for integrating the research results or research implementation into educational purposes reflects that the research has been completed with wider impact in mind.

Development Criteria

The criteria used to identify skills and competencies in development will be crucial for Principal Research Scientists. Principal Research Scientists will require a good level of understanding and demonstrated ability in the criteria listed below. Quantitative criteria such as the amount or extent of development project experience, stakeholder collaboration and funding received will continue to play an important role. However, the qualitative criteria will highlight the quality of their researchers' accomplishments and future potential.

Experience in Applied Research	
Criteria	Description
Variation of different development project collaborations (especially involving the business industry).	➤ Desirable to see that researchers have been involved in various development projects. ➤ The career stage of the researcher needs to be considered. More variation is desirable in more senior researcher career stages. ➤ Development projects within the business industry are prioritised.
Variation of role and contribution in different development projects (especially involving the business industry).	➤ Desirable to see that researchers have experience in different roles in development projects. ➤ The career stage of the researcher needs to be considered. More variation is desirable in more senior researcher career stages. ➤ Different roles reflect flexibility, teamworking and collaboration skills. ➤ Development projects within the business industry are prioritised.

Variation of stakeholders in development projects	➤ Desirable to see variation in different types of stakeholders used and incorporated into development projects. ➤ A variation of stakeholders reflects skills in stakeholder inclusion, communication, teamwork and collaboration, and innovative flexibility.
Transdisciplinary, interdisciplinary, multidisciplinary approach (use of multiple researchers, disciplines, partners etc.)	➤ Desirable to see that researchers have applied or have experience in being involved in transdisciplinary, interdisciplinary, multidisciplinary development projects. ➤ Here it is also important to consider lessons learnt. If transdisciplinary, interdisciplinary, multidisciplinary approaches have not been used or incorporated effectively, the researcher's acknowledgement of this is also valuable.

Funding Applications	
Criteria	Description
Variation of role	➤ Desirable to see variation of roles in funding applications, ➤ Variation role reflects skills in teamwork and collaboration, communication and suggests researchers have a holistic understanding of the funding application process. ➤ Unsuccessful applications can be included.
Variation of funding sources	➤ Desirable to see a variation of different funding sources applied to. ➤ The career stage of the researcher needs to be considered. More senior researchers are more likely to have a wider variation in sources. ➤ Variation in funding sources. ➤ Unsuccessful applications can be included.
Quality of funding applications	➤ Reviewers feedback, score, placement etc. can be examined for both unsuccessful and successful funding applications.
Variation of funding application collaborations	➤ Desirable for researchers to have experience in different funding application collaborations. ➤ Variation in collaboration in terms of size and variation in collaborators (international, discipline etc.), reflects innovative flexibility, communication skills, teamwork and collaboration skills. ➤ These details can be examined by discussing the previous funding application experiences of researchers.

Stakeholder Inclusion	
Criteria	Description
	➤ Desirable to see variation in different types of stakeholders used and incorporated into development projects.

Variation of stakeholders in development projects	➤ A variation of stakeholders reflects skills in stakeholder inclusion, communication, teamwork and collaboration, and innovative flexibility. ➤ A prioritisation is given to experience in/with the business industry.
Extent of stakeholder inclusion in development projects (time, project phase etc).	➤ The amount of stakeholder inclusion in development projects is also important to consider. ➤ This can include to what extent stakeholders have been engaged with, the way they have been consulted with or incorporated into the project, in which project phases, and the time spent with stakeholders in general.
Stakeholder benefit of research and/or project	➤ Desirable to see that development projects have had practical benefits to stakeholders. ➤ This can be reflected in stakeholders adopting project proposals and/or developed services, projects etc, positive stakeholder feedback, multiple and/or extended collaboration with the same stakeholders. ➤ A prioritisation is given to experience in/with the business industry.
Practical adoption of research, knowledge, service etc.	➤ Similar to the above, it is desirable to see that development projects have had practical benefits to stakeholders and/or to the wider public. ➤ Development project outputs have been adopted by the direct stakeholders and/or the wider public.

Innovation Criteria

Innovation criteria are arguably difficult to measure qualitatively. Whilst achievements such as awards, patents and other formal recognition highlight a researcher's actual achievements in innovation, these may not be appropriate in all fields and/or for earlier researcher career stages. Below, the skills associated with innovation are instead focused upon. Whilst actual achievements continue to be recognized, consideration is also given for those researchers who showcase great potential in innovative thinking. The criteria have been designed to help capture innovative nature within researchers.

Collaboration Skills *(flexibility to collaborate and communicate with different people for different purposes)*

Criteria	Description
Variation of authorship collaborations	➤ Researchers' ability to collaborate with a variety of authors including from different research fields or industries, different nationalities, different perspectives can demonstrate flexibility. ➤ Here variation is important. ➤ The researcher career stage should be considered. Variety is important for more senior researchers.

Variation of authorship role	➤ Desirable to see varying roles in authorship as this reflects ability, in being able to collaborate in different team roles and having teamwork skills.
Variation of trans-, inter-, multidisciplinary collaborations	➤ A variation of collaboration in trans-, inter-, multidisciplinary approaches demonstrates flexibility in working with different perspectives, researchers, disciplines and applying different approaches.
Variation of role in development projects	➤ Desirable to see varying roles in development projects, this reflects being able to collaborate in different team roles and having teamwork skills. ➤ A prioritisation is given to experience in/with the business industry.
Variation of development project stakeholder and/or partner collaborations	➤ Researchers' ability to collaborate with various stakeholders or other partners demonstrates innovative flexibility and team work skills as they are able to work with different industries and able to incorporate different ideas and needs. ➤ A prioritisation is given to experience in/with the business industry.

Problem-Solving Skills *(demonstrated ability to provide solutions to real problems and to real stakeholders)*

Criteria	Description
Experience working in development projects (or other professional roles) which have solved stakeholder problems.	➤ Desirable to see that researchers have experience with working on development projects (or other professional roles) which incorporate problem solving duties for stakeholders. ➤ A prioritisation is given to experience in/with the business industry.
Variation of stakeholders in development projects	➤ Desirable to see that researchers can solve problems and provide solutions for different stakeholders, with varying scenarios, needs and perspectives. ➤ A prioritisation is given to experience in/with the business industry.
Stakeholder benefit of research and/or project	➤ Desirable to see that researchers have been able to successfully provide solution which benefit stakeholders. ➤ This can be reflected in stakeholders adopting project proposals and/or developed services, projects etc, positive stakeholder feedback, multiple and/or extended collaboration with the same stakeholders. ➤ A prioritisation is given to experience in/with the business industry.
Practical adoption of research, knowledge, service etc.	➤ Similar to the above, it is desirable to see that development projects have had practical benefits to stakeholders and/or to the wider public.

	➤ Development project outputs have been adopted by the direct stakeholders and/or the wider public. ➤ This reflects being able to problem solve not only for the direct stakeholder but also for the wider project.
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Activeness In Field <i>(up to date and active with relevant networks and events)</i>	
Criteria	Description
Activeness in development projects	➤ It is desirable to see continued activity in conducting or participating in development projects. ➤ Continued activeness demonstrates up to date understanding of stakeholder needs and issues. ➤ However, it is important to consider career breaks, career stages and employment in other professions. ➤ Recent experience is important. ➤ A prioritisation is given to experience in/with the business industry.
Activeness in funding applications	➤ It is desirable to see continued activity in submitting, applying or participating in funding applications. ➤ Continued activeness demonstrates motivation to seek funding and innovate new research and/project ideas. ➤ However, it is important to consider career breaks, career stages and employment in other professions. ➤ Recent experience is important.
Activeness in publication and authorship	➤ It is desirable to see continued activity in submitting, applying or participating in funding applications. ➤ Continued activeness demonstrates up to date understanding of research, debates, perspectives and academic trends. ➤ However, it is important to consider career breaks, career stages and employment in other professions. ➤ Recent experience is important.
Activeness in relevant events and networks	➤ It is desirable to see continued activity in researcher attending networking events, webinars, conferences, discussions etc. ➤ This reflects up to date awareness of relevant issues, networks, challenges, opportunities and findings in the field.

Wider Social Impact <i>(ability to apply research and problem solving in a deeper context)</i>	
Criteria	Description
Consideration of regional, national, and/or international strategies	➤ Examine the current completed research or the previously completed research. ➤ The application or consideration for regional, national and/international strategies and/or objectives reflects that the research has been completed with wider impact in mind.

Consideration of HAMK research strategy, study units and/or courses in research plan	➤ Desirable for researchers to be able to consider the integration of their current research or previously conducted research with HAMK's research strategy and/or study units. ➤ This can be examined in the research proposal or ask the researcher to explain their consideration of research and education integration in their previous research.
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Creativity (<i>willingness and motivation to experiment and take risks</i>)	
Criteria	Description
Ability to envision new possibilities and ideas	➤ Desirable to see that researchers are interested and motivated in conducting innovative research and open to 'outside of the box' ideas. ➤ This skill can be examined by discussing current and or previous research or development projects and what motivated them to conduct the research or why they thought their research was relevant. ➤ This skill can also be examined by discussing what the researchers 'ideal' research or development project proposal would be.
Willingness to try new approaches	➤ Desirable to see that researchers are interested and motivated in conducting innovative research and open to 'outside of the box' ideas and try new ideas. ➤ This skill can be examined by discussing current and or previous research or development projects and to what extent new approaches (ideas, tools, theories, stakeholder etc.) were incorporated. ➤ This skill can also be examined by discussing the researchers 'ideal' research or development project proposal.
Open to taking calculated risks	➤ Desirable to see that researchers can take calculated risks when exploring or attempting new innovative research or development projects. ➤ This can be examined by discussing current or previous research or development projects and how they considered the practicality and feasibility of these. ➤ This can also be examined when discussing the researchers 'ideal' research or development project proposal and to what extent their ideal proposal considers feasibility, practicality, reliability etc.

Pedagogical Criteria

Principal Research Scientists are required to also integrate research with education, especially within HAMK itself. Integrating research may consist of conducting teaching, designing study units, collaborating with students or lecturers, or utilising study units to innovate research ideas and solutions. The criteria below help to capture the pedagogical

skills and experiences of the researchers. These can be further developed during the tenure track process.

Pedagogical Communication Skills	
Criteria	Description
Preparation of educational materials	➤ Desirable to see that researchers have experience in developing educational materials. ➤ The importance of this skill is highly dependant on the role and duties of the researchers. ➤ Being able to develop and prepare educational materials reflect pedagogical skills but also communication skills.
Experience in facilitation activities and/roles	➤ If researchers are expected to conduct teaching, having experience in facilitating activities or having facilitation roles reflects communication skills which support being able to manage group settings. ➤ Such experience is also important for researchers in stakeholder facilitation situations.
Experience in teaching activities and/roles	➤ If researchers are expected to conduct teaching, having experience in teaching and/or have pedagogical qualifications and training is important.
Variation in teaching, and/or facilitation audiences	➤ Experience in teaching and facilitating a variation of audiences reflects adaptive communication skills and knowledge of being able to teach and manage different groups and/or individuals. ➤ Desirable to see that researchers have experience in teaching different types of audiences.

Pedagogical Collaboration	
Criteria	Description
Experience designing and developing study units with other researchers and/or lectures	➤ It is desirable to see that researchers have experience in developing study units as this reflects the ability to collaborate with other researchers and/or lecturers to develop pedagogical material. ➤ This reflects the ability of the researcher to collaborate at a pedagogical level.
Experience in pedagogical collaboration projects	➤ It is desirable to see that researchers have been involved in development projects which focus on pedagogical institutions, stakeholders, tools, etc. ➤ This skill may only be relevant to researchers in specific fields where development projects with a pedagogical aspect is required.
	➤ If researchers have experience collaborating with educational professional, it reflects communication and collaboration

Collaboration with educational professionals, lecturers, etc.	skills which is needed for those institutions and stakeholders.
Integrating study units into research and/or development projects	➤ Desirable that researchers have had previous experience in utilising or incorporating study units into research and/or development projects. ➤ This may include using students in the research and/or project, presenting research and/or project outputs etc. in courses, using students to help develop or test ideas and solutions etc. ➤ This can also be discussed with the researcher on their current research proposal, how they plan to consider or integrate study units and courses into their research.
Development of learning methods and tools	➤ Desirable that researchers have experience in actively developing learning methods or tools. ➤ This may include contributing to workshops, brainstorming sessions, participation in relevant development projects, being a specific duty or role, etc.
Development of teaching	➤ Desirable that researchers have experience in actively developing teaching methods. ➤ This may include contributing to workshops, brainstorming sessions, participation in relevant development projects, being a specific duty or role, etc.

Peer Recognition in Pedagogical Field

Criteria	Description
Awards or nominations related to teaching and/or pedagogical achievements	➤ Awards, nominations etc. which have been recognised by peers in the pedagogical field are very significant. ➤ This will only be relevant for those researchers who have a significant amount of teaching duties and/or activities. ➤ The career stage of the researcher needs to also be considered. Peer recognition will most likely accumulate alongside the length of the researcher's career.
Invitations or experience as guest lecturer, speaker etc. at events related to pedagogy	➤ Desirable to see researchers have been invited to pedagogical events, seminars, lectures as guest speakers etc. ➤ This reflects that the researcher is known in the pedagogical field and is respected.
Invitation to attend media, workshops, webinars etc. related to pedagogy as an expert	➤ Desirable to see researchers have been invited to act as an 'expert' in the field of pedagogy in media, webinars, seminars etc. events, seminars, lectures as guest speakers etc. ➤ This reflects that the researcher is known in the pedagogical field and is respected.

Other Competencies

Principal Research Scientists at HAMK also require skills and experience within other competence areas. The duties of Principal Research Scientists include leading and managing research groups, and conducting research in accordance with the vision, strategy and objectives of HAMK.

Leadership Skills and Experience	
Criteria	Description
Experience in leadership roles	➤ Desirable for researchers to have experience in leadership roles. ➤ This can include roles related to research and/or development projects but other experience in other duties and professions is also acknowledged.
Participation in leadership courses	➤ If researchers do not have active leadership experience, training courses are desirable to see, ➤ Here, all courses and training in leadership are important but especially for those who do not have as much leadership experience.
Demonstrates similar leadership values and understanding of duties as organization	➤ Desirable for researchers to portray similar leadership values as HAMK. ➤ It is important for the researcher to have a clear understanding that they will be leading a research group, and this requires the researcher to strive for the success of the research group as opposed to only their own individual success and development.

Peer Impact Skills	
Criteria	Description
Experience in providing peer review, on research, funding applications, projects etc.	➤ Desirable for researchers to have experience in providing feedback on their own peers through different activities and duties. ➤ This can include roles related to research and/or development projects but other experience in other duties and professions is also acknowledged

Mentoring, Facilitation and Supervision Skills	
Criteria	Description
Experience in mentoring, facilitating and/or supervision roles	➤ Desirable for researchers to have experience in mentoring, facilitating and/or supervision roles. This can include duties and roles outside of research and/or development projects.

- **Mentoring, facilitation and supervisions** roles can include a range of activities and duties. Student thesis supervision, workshop facilitation, training other researchers etc.

Similar Values to Organisation

Criteria	Description
Demonstrates willingness to incorporate trans-, inter-, and multidisciplinary approaches and recognizes their importance,	➤ Desirable for researchers to be willing, motivated and flexible enough to incorporate transdisciplinary, interdisciplinary, multidisciplinary approach, ➤ This can be examined when discussing the researchers current and/or previous research and to what extent they have or plan to incorporate transdisciplinary, interdisciplinary, multidisciplinary approach. ➤ It is important to consider the role of specialization in certain fields, but there should be willingness to consider transdisciplinary, interdisciplinary, multidisciplinary approaches.
Demonstrates similar teamwork values and expected duties as organization	➤ Desirable for researchers to portray similar teamwork values as HAMK. ➤ Desirable for researchers to understand the importance of teamwork in their respective research groups and the centrality placed on teamwork with stakeholders, project partners, other researchers etc. ➤ Important for researchers to understand that they will not be conducting research alone.
Demonstrates similar leadership values and understanding of expected duties as organization	➤ Desirable for researchers to portray similar leadership values as HAMK. ➤ It is important for the researcher to have a clear understanding that they will be leading a research group, and this requires the researcher to strive for the success of the research group as opposed to only their own individual success and development.

Communication & Dissemination Skills

Criteria	Description
Extent of research dissemination	➤ Desirable for researchers to have experience in sharing research results. ➤ This includes research being shared in events, conferences, webinars, blogs, social media etc. ➤ Important for researchers to be aware of appropriate platforms where research can be disseminated. ➤ This can be examined in the research proposal or ask the researcher to explain their research dissemination choices and experience in previous research. ➤ This criterion reflects wider dissemination skills, academic communication skills, and networking skills.

Variation of communication platforms used	➤ Desirable for researchers to have experience using multiple different platforms when communicating and/or disseminating research. ➤ Variation in communication platforms which also target different audiences is desirable. ➤ Here it is important to see that researchers are familiar with different forms of dissemination platforms and when to utilise them. ➤ Knowledge and use of platforms relevant to the business industry is especially important.
Variation of languages used	➤ Communication which has been produced in more than one language suggests wider outreach. ➤ It would be especially important for materials to be produced in the local language to reach local audiences and stakeholders. ➤ It would also be important for communication to be produced in English as this allows for international outreach.
Variation of target audiences	➤ Desirable for researchers to have experiences in communicating with or to a variation of audiences. ➤ Being able to verbally and non-verbally communicate with different industry official, policymakers, students and citizens is very valuable and supports open access of research and wider social impact opportunities. ➤ This also includes producing and adapting materials and speeches to relate to different audiences. ➤ Communication with a variation of business industry stakeholders is particularly important.
Open access	➤ Communication which supports open access principles is also important. ➤ Whilst this may be difficult to assess, publishing with open access in mind, translating research or information into local languages, creating free and accessible material, presenting at open events, adapting language style to communicate with different audiences can all be used to support open access.
Variation of mediums used to present research and data	➤ Desirable for researchers to have experience in producing different materials to communicate research outputs. ➤ This may include presentations, short blogs, one pager, social media posts, diagrams, graphs etc. ➤ The research field needs to be considered as this criterion may be more relevant or applicable in certain fields.
Preparation of marketing and pitching material	➤ Desirable for researchers to have experience in producing or contributing to marketing and pitching materials. ➤ Being able to effectively pitch research ideas to business industry stakeholders is an important aspect in HAMK.
Variation of development project stakeholder and/or partner collaborations	➤ Researchers' ability to collaborate with various stakeholders or other partners demonstrates flexibility in working with different industries and being able to incorporate different ideas and needs.

	➤ A prioritisation is given to experience in/with the business industry.
Extent of face-to-face stakeholder interaction.	➤ Desirable for researchers to have experience in live or face-to-face interaction with stakeholders. ➤ The type of interaction may vary. Being present 'live' at business meetings, board meetings, conferences, events, debates etc. ➤ Here experience in face-to-face interaction with business industry stakeholders is especially important. ➤ Face-to-face interaction also supports effective networking skills.

Adoption of Open Science Practices

At HAMK the utilisation of the criteria below, will most likely occur during the tenure track evaluation process. However, the below mentioned criteria can also be applied and identified when examining previous or proposed research.

Criteria	Description
Open access publication and research dissemination	➤ Desirable for researchers to recognise the importance of publishing and disseminating research and project outputs openly. ➤ This can be examined by discussing previous, current or future ideas for research and how open access publication has been considered or incorporated. ➤ The research field and nature of research needs to be considered. If open access principles cannot be adhered to, justification for this is equally important.
Open data sharing	➤ Importance for researchers to recognise the importance of open access principles such as open data sharing. ➤ This can be examined by discussing previous, current or future ideas for research and how open data sharing has been considered or incorporated. ➤ The research field and nature of research needs to be considered. If open access principles cannot be adhered to, justification for this is equally important.
Open methods	➤ Importance for researchers to recognise the importance of open access principles such as open methods sharing. ➤ This can be examined by discussing previous, current or future ideas for research and how open method sharing has been considered or incorporated. ➤ The research field and nature of research needs to be considered. If open access principles cannot be adhered to, justification for this is equally important.
Sharing with society members and businesses	➤ Important for researchers to acknowledge that research and project outputs and general information should be effectively shared with relevant stakeholders and society at large. ➤ Important for researchers to understand the importance of ordinary citizens being aware of research and being able to benefit from it.

	➤ This can be examined by discussing previous, current or future ideas for research and how awareness to other relevant stakeholders and ordinary citizens has been considered or incorporated. ➤ The research field and nature of research needs to be considered. If open access principles cannot be adhered to, justification for this is equally important.
Open educational resources	➤ Desirable for researchers to understand the importance of creating educational materials which can be used at HAMK and disseminated to other relevant stakeholders and ordinary citizens. ➤ This can be examined by discussing previous, current or future ideas for research where educational materials have been produced or will be produced. ➤ The open access and open sharing of educational materials can be discussed. ➤ This may only be relevant to certain researchers from certain research fields. ➤ The research field and nature of research needs to be considered. If open access principles cannot be adhered to, justification for this is equally important.

Recognition in Industry and/or Field

Criteria	Description
Awards, nominations, special mentions etc.	➤ Awards, nominations and special mentions in research and or in relevant industry are recognised.
Guest speaker invitations to events, conferences, webinars,	➤ Desirable for researchers to be recognised in their relevant research field and or industry. ➤ Invitations to act as guest speakers or specialists at events, conferences, debates, media etc.
Specialist or expert job titles in the business industry field	➤ Specialist job titles and roles in other relevant professions can also be acknowledged.

Networking Skills

Criteria	Description
Extent of existing networks	➤ Existing networks in the business industry, academic institutions, government and civil society call all be recognised. ➤ This can be examined through current memberships and activities in different events, networks, discussions etc. ➤ Collaboration in projects, with stakeholders, policymakers, educators etc. can also be recognised.

	➤ Networks in the business industry is particularly important.
Experience in networking roles	➤ Desirable for researchers to have active networking experience. ➤ This can also be recognised in other professions or duties outside of research and project implementation.
Experience in face-to-face networking	➤ Desirable for researchers to have experience in networking at live events as this requires different communication and networking skills in comparison to virtual events. ➤ This can be examined through their 'live' attendance at conferences, events, debates, and other networking event.
Ability to recognize appropriate networks	➤ Desirable for researchers to be aware or knowledgeable of appropriate networks on their research and/development projects. ➤ This can be primarily examined when discussing the researchers research proposal.

Teamwork and Collaboration Skills	
Criteria	Description
Variation of development project, stakeholder and/or partner collaborations	➤ Researchers' ability to collaborate with various stakeholders or other partners demonstrates flexibility in working with different industries and being able to incorporate different ideas and needs. ➤ A prioritisation is given to experience in/with the business industry.
Demonstrated teamwork experience	➤ Desirable for researchers to have experience in teamwork. ➤ Teamwork experience in other professions and roles outside of research and/or development projects are also acknowledged.